

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph that begins on page 1, line 6 with the following amended paragraph:

- 5       The present invention relates generally to computers and like devices, and more particularly to methods and arrangements for routing server requests to applicable user-mode worker processes based on the requested uniform request-resource locator (URL).

- 10       Please replace the paragraph that begins on page 1, line 20 with the following amended paragraph:

- Regardless of how a user ultimately connects to the Internet/World Wide Web, once connected the user typically accesses information available therein by using a web browser or like application. A web browser, such as, for  
15       example, Internet Explorer (IE) available from the Microsoft Corp., of Redmond, WA, is configured to access web pages that are provided through the Internet by other computers. For example, a web server computer may be connected to the Internet and configured with one or more web sites, each having one or more web pages that the user may selectively download and view and possibly  
20       possibly interact with. To identify which web site/page the user will typically select a hyper link to the desired web site/page or may choose to manually enter a unique name for the web site/page. The most common name used for identifying a web site/page is known as the uniform resource locator (URL).

Please replace the paragraph that begins on page 2, line 16 with the following amended paragraph:

When a typical web server receives a request, e.g., an HTTP request, from a web browser, it needs to handle the request. Hence, a web server process may be configured to handle the request itself, or may need to pass the request on to another process, e.g., a worker process, that is configured to handle the request. Conventional web server processes tend to listen to a particular port (e.g., "port 80") provided by a Transmission Control Protocol/Internet Protocol (TCP/IP) kernel-mode provided service. When a request is received, the web server process either handles the request or calls for a worker process to handle the request. To determine which worker process should handle the request, most conventional web server processes either map the request to a physical file or to a dynamic application of some sort, such as a DLL or CGI process. Mapping is typically based on the extension provided at the end of the URL. For example, an ".html" extension signifies that the desired web page is in a HyperText Markup Language format. This extension could then be found, for example, in a look-up table, and associated with a specific worker process, if needed. Conversely, the ".html" extension may identify that the web server process can handle the request itself. There exists a plurality of extensions that may be used to identify the applicable worker process.

Please replace the paragraph that begins on page 4, line 6 with the following amended paragraph:

The above stated needs and ~~other~~others are met, for example, by a method in accordance with certain exemplary implementations of the present invention. The method includes causing a kernel-mode process or service in a server device to compare a hierarchical identifier associated with a client device generated request with at least a portion of a configuration file. This comparison identifies, if possible, a most-applicable user-mode process for handling the request within the server device. The method further includes causing the kernel-mode process to provide the request to the identified most applicable user-mode process. In certain further implementations, the method includes causing a user-mode administrative process to generate the configuration file, for example, by providing a configuration store suitable for access by the user-mode administrative process. In certain configurations, the configuration file is accessed via API calls. Here, the configuration store defines one or more logical associations between at least one candidate hierarchical identifier and at least one candidate user-mode process. In certain instances, the configuration store may also include one or more logical rules that are suitable for implementation by the kernel-mode process in identifying the most applicable user-mode process for handling the request within the server device.

Please replace the paragraph that begins on page 6, line 23 with the following amended paragraph:

Fig. ~~[[3]]~~ 4 is a block diagram depicting certain kernel-mode and user-mode processes, including a kernel-mode universal listener (UL) process, associated with an improved web server in accordance with certain exemplary implementations of the present invention.

Please replace the paragraph that begins on page 7, line 3 with the following amended paragraph:

Fig. ~~[[4]]~~ 5 is a diagram illustratively depicting a hierarchical structure of a configuration file associated with a kernel-mode universal listener (UL) process, for example, as in Fig. ~~[[3]]~~ 4, in accordance with certain exemplary implementations of the present invention.

Please replace the paragraph that begins on page 11, line 24 with the following amended paragraph:

Reference is now made to Fig. 2, which depicts an exemplary conventional web server arrangement 200. Here, requests are received from a client computer, e.g., over a network and applicable interfaces (not shown), by a kernel-mode TCP/IP service 202. TCP/IP service 202 provides the request to a user-mode web server process 204 through a port. By way of example, web server process 204 may be an IIS web server process as developed by Microsoft Corp. As illustrated, web server process 204, when needed, can

initiate a process hop to one or more user-mode worker processes 206, as represented by line 208. Worker processes ~~[[208]]~~ 206 may take the form of any of a variety of functions, and/or applications, which are configured to handle or otherwise support certain types of requests. As described in the previous

5 Background Section, to determine which of worker process 206 needs to handle a given request, web server process 204 can access a mapping function 210 (e.g., a table, list, etc.) and identify an appropriate worker process based on the extension-identifying portion of the URL in the request. Alternatively, web server 204 may require the assistance of a DLL 212 in making such a decision.

10 Here, for example DLL 212 or a like capability would identify the appropriate worker process based on the extension-identifying portion of the URL in the request.

Please replace the paragraph that begins on page 12, line 17 with the

15 following amended paragraph:

Fig. 3 presents a flow chart depicting an exemplary conventional method 300 for handling requests received by web server arrangement 200. In step 302, the request is received by TCP/IP service 202 and passed on to web server process 204. Next, in step 304, web server 204 determines if there is a

20 need to invoke a worker process 206. Again this is typically determined based on the extension-identifying portion of the URL. The extension-identifying portion of the URL essentially identifies the type of data associated with the defined URL, and consequently may be used to redirect or route the request to

an applicable user-mode process. The next step, 306, is to pass or route the request to the applicable user-mode process for further handling.

Please replace the paragraph that begins on page 18, line 15 with the  
5 following amended paragraph:

In accordance with certain further implementations of the present invention, method 600 may further include step 610. In step 610, UL service 402 is further configured to maintain a queuing mechanism or process that holds requests, as needed, until such time as the selected user mode process  
10 is ready to handle ~~[[to]]~~ the request. Thus, for example, there may be a need to buffer the request while a new user-mode process is loaded. There may also be a need to buffer a request until the requisite processing/communication resources become available to handle the request and/or user-mode process.

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